STIC Search Report
EIC 1700

STIC Database Tracking Number: 152326

TO: Steven Rosasco **Location: REM 9A71** **Art Unit : 1756** 9019 **May 3, 2005** **Case Serial Number: 10/701023**	**From: Mrs. Kendra Banks** **Location: EIC 1700** **REM 4B28** **Phone: 571-272-2516** **Kendra.Mellerson@uspto.gov**

Search Notes

No Cases Reported

US 6,368,755

Mellerson, Kendra

From: Rosasco, Steven
Sent: Tuesday, May 03, 2005 9:59 AM
To: STIC-EIC1700
Subject: REISSUE - LITIGATION SEARCH

I am requesting a Litigation Search on Patent 6,368,755, for reissue.
Reissue application No. 10/701023.

Thankyou, S. Rosasco

Stephen Rosasco
Primary Examiner
Art Unit 1756
Remsen 9A71
571 272-1389

Current session 03/05/2005

Query/Command : N

..FILE / ..INFO / ..GUIDE

Query/Command : FILE PLUSPAT

QUESTEL - Time in minutes : 0,73
The cost estimation below is based on Questel's standard price list

Estimated cost	:	0.79 USD
Cost estimated for the last database search	:	0.79 USD
Estimated total session cost	:	0.79 USD

Selected file: PLUSPAT

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New Patent Citation Commands & FAM Citation Report - see INFO PATCITE
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-To retrieve set of high relevancy X coded cited patents, use xctx=yes
-To extract cited patents with only high relevancy code, use mem/xctx
Last update of file: 2005/04/27 (YYYY/MM/DD) 2005-16/UP (last update)

Search statement 1

Query/Command : US6368755/PN

**** SS 1: Results 1**

Search statement 2

Query/Command : PRT FULL NONSTOP LEGALALL

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1 / 1 PLUSPAT - ©QUESTEL-ORBIT - image

PN - US6368755 B1 20020409 [US6368755]
TI - (B1) Masks for use in optical lithography below 180 nm
PA - (B1) ROCHESTER INST OF TECHNOLOGY (US)
PA0 - Rochester Institute of Technology, Rochester NY [US]
IN - (B1) SMITH BRUCE W (US)
AP - US49877500 20000204 [2000US-0498775]
FD - Rel. Prov. 60/118,795 19990205 [1999US-P118795]
PR - US49877500 20000204 [2000US-0498775]

US11879599P 19990205 [1999US-P118795]

IC - (B1) G03F-009/00

EC - G03F-001/08

PCL - ORIGINAL (O) : 430005000

DT - Basic

CT - US4722878; US5679484; US5962174; US5963841; US6027815; US6040892

STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001

AB - A mask for use on a layer of imaging material which is located on at least a portion of one surface of a substrate in a lithography process in accordance with one embodiment of the present invention includes a layer of a masking material which has an optical density of at least 4.0 for wavelengths at or below about 180 nm and a thickness of less than about 1000 angstroms. Materials, such as tungsten and amorphous silicon, can be used for the mask.

UP - 2002-16

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1 / 1 LGST - ©EPO

PN - US6368755 B1 20020409 [US6368755]

AP - US49877500 20000204 [2000US-0498775]

ACT - 20000205 US/AS-A
ASSIGNMENT
OWNER: ROCHESTER INSTITUTE OF TECHNOLOGY 5 LOMB MEMORIAL; EFFECTIVE DATE: 20000202
ASSIGNMENT OF ASSIGNORS INTEREST;ASSIGNOR:SMITH, BRUCE W.;REEL/FRAME:010585/0012

20040113 US/RF-A
REISSUE APPLICATION FILED
EFFECTIVE DATE: 20031104

UP - 2004-26

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1 / 1 CRXX - ©CLAIMS/RRX

PN - 6,368,755 A 20020409 [US6368755]

PA - Rochester Inst of Technology

ACT - 20031104 REISSUE REQUESTED
ISSUE DATE OF O.G.: 20040113
REISSUE REQUEST NUMBER: 10/701023
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 1756

Reissue Patent Number:

Search statement 2

Query/Command : FILE INPADOC

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PLUSPAT      - Time in minutes :   0,42
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                              Estimated cost :    1.40 USD
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Estimated total session cost                :    3.34 USD

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standard price list
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Legal-Status informations       :      1
                              Estimated cost :    0.50 USD
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standard price list
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standard price list
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Cost estimated for the last database search :    0.02 USD
Estimated total session cost                :   10.77 USD

Selected file: INPADOC

 You are now connected to INPADOC
 Covers 1968/1973 thru weekly updates (2005-17)
 For information on content, (..)INFO INPD.

Search statement   1
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Query/Command : FAM US6368755/PN

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1 Patent Groups
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**** SS 1: Results 4**

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Search statement   2
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Query/Command : FAMSTATE NONSTOP

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1 / 4 INPADOC - ©INPADOC

PN - AU 200028694 A5 20000825 [AU200028694]
TI - MASKS FOR USE IN OPTICAL LITHOGRAPHY BELOW 180 NM
IN - SMITH BRUCE W
PA - ROCHESTER INST OF TECHNOLOGY
AP - AU 28694/00-A 20000204 [2000AU-0028694]
PR - US 118795/99-P 19990205 [1999US-P118795]
WO 200002873/00(US)-W 20000204 [2000WO-US02873]
IC - G03F-009/00

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2 / 4 INPADOC - ©INPADOC

PN - US 6368755 BA 20020409 [US6368755]
TI - MASKS FOR USE IN OPTICAL LITHOGRAPHY BELOW 180 NM
IN - SMITH BRUCE W [US]
PA - ROCHESTER INST OF TECHNOLOGY [US]
AP - US 498775/00-A 20000204 [2000US-0498775]
PR - US 498775/00-A 20000204 [2000US-0498775]
US 118795/99-P 19990205 [1999US-P118795]
IC - G03F-009/00

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1 / 1 LEGALI - ©EPO

PN - US6368755 B1 20020409 [US6368755]
AP - US49877500 20000204 [2000US-0498775]
ACTE - 20000205 US/AS-A
ASSIGNMENT
OWNER: ROCHESTER INSTITUTE OF TECHNOLOGY 5 LOMB MEMORIAL; EFFECTIVE DATE: 20000202
ASSIGNMENT OF ASSIGNORS INTEREST;ASSIGNOR:SMITH, BRUCE W.;REEL/FRAME:010585/0012

20040113 US/RF-A
REISSUE APPLICATION FILED
EFFECTIVE DATE: 20031104
UP - 2004-26

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3 / 4 INPADOC - ©INPADOC

PN - WO 200046643 A1 20000810 [WO200046643]
TI - MASKS FOR USE IN OPTICAL LITHOGRAPHY BELOW 180 NM
LA - ENG
IN - SMITH BRUCE W
PA - ROCHESTER INST OF TECHNOLOGY [US]

AP - WO US 200002873/00(US)-A 20000204 [2000WO-US02873]
PR - US 118795/99-P 19990205 [1999US-P118795]
IC - G03F-009/00
DS - AE* AL* AM* AT* AU* AZ* BA* BB* BG* BR* BY* CA* CH* CN* CU* CZ* DE* DK* EE* ES* FI* GB* GD* GE* GH* GM* HR* HU* ID* IL* IN* IS* JP* KE* KG* KP* KR* KZ* LC* LK* LR* LS* LT* LU* LV* MD* MG* MK* MN* MW* MX* NO* NZ* PL* PT* RO* RU* SD* SE* SG* SI* SK* SL* TJ* TM* TR* TT* UA* UG* UZ* VN* YU* ZA* ZW* GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

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1 / 1 LEGALI - ©EPO

PN - WO200046643 A1 20000810 [WO200046643]WO200046643 A9 20020214 [WO200046643]
AP - WOUS0002873 20000204 [2000WO-US02873]
ACTE -

20000810 WO/AK [+]
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20000810 WO/AL [+]
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20001004 WO/121
EP: THE EPO HAS BEEN INFORMED BY WIPO THAT EP WAS DESIGNATED IN THIS APPLICATION

20010208 WO/DFPE
REQUEST FOR PRELIMINARY EXAMINATION FILED PRIOR TO EXPIRATION OF 19TH MONTH FROM PRIORITY DATE

20011206 WO/REG; DE/8642 [-]
DE: IMPACT ABOLISHED FOR DE
<DE>

20020214 WO/AK [+]
DESIGNATED STATES
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20020214 WO/AL [+]
DESIGNATED COUNTRIES FOR REGIONAL PATENTS
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20020214 WO/COP
CORRECTED VERSION OF PAMPHLET
PAGES 1/2-2/2, DRAWINGS, REPLACED BY NEW PAGES 1/5-5/5; DUE TO LATE TRANSMITTAL BY THE RECEIVING OFFICE

20020731 WO/122 [-]
EP: PCT APP. NOT ENT. EUROP. PHASE

UP - 2004-24

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4 / 4 INPADOC - ©INPADOC

PN - WO 200046643 C2 20020214 [WO200046643]
TI - MASKS FOR USE IN OPTICAL LITHOGRAPHY BELOW 180 NM
LA - ENG
IN - SMITH BRUCE W
PA - ROCHESTER INST OF TECHNOLOGY [US]
AP - WO US 200002873/00(US)-A 20000204 [2000WO-US02873]
PR - US 118795/99-P 19990205 [1999US-P118795]
IC - G03F-009/00
DS - AE* AL* AM* AT* AU* AZ* BA* BB* BG* BR* BY* CA* CH* CN* CU* CZ* DE* DK* EE* ES* FI* GB* GD* GE* GH* GM* HR* HU* ID* IL* IN* IS* JP* KE* KG* KP* KR* KZ* LC* LK* LR* LS* LT* LU* LV* MD* MG* MK* MN* MW* MX* NO* NZ* PL* PT* RO* RU* SD* SE* SG* SI* SK* SL* TJ* TM* TR* TT* UA* UG* UZ* VN* YU* ZA* ZW* GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

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1 / 1 LEGALI - ©EPO

PN - WO200046643 A1 20000810 [WO200046643]WO200046643 A9 20020214 [WO200046643]
AP - WOUS0002873 20000204 [2000WO-US02873]
ACTE - 20000810 WO/AK [+]
DESIGNATED STATES
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20000810 WO/AL [+]
DESIGNATED COUNTRIES FOR REGIONAL PATENTS

GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

20001004 WO/121
EP: THE EPO HAS BEEN INFORMED BY WIPO THAT EP WAS DESIGNATED IN THIS APPLICATION

20010208 WO/DFPE
REQUEST FOR PRELIMINARY EXAMINATION FILED PRIOR TO EXPIRATION OF 19TH MONTH FROM PRIORITY DATE

20011206 WO/REG; DE/8642 [-]
DE: IMPACT ABOLISHED FOR DE
<DE>

20020214 WO/AK [+]
DESIGNATED STATES
AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW

20020214 WO/AL [+]
DESIGNATED COUNTRIES FOR REGIONAL PATENTS
GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

20020214 WO/COP
CORRECTED VERSION OF PAMPHLET
PAGES 1/2-2/2, DRAWINGS, REPLACED BY NEW PAGES 1/5-5/5; DUE TO LATE TRANSMITTAL BY THE RECEIVING OFFICE

20020731 WO/122 [-]
EP: PCT APP. NOT ENT. EUROP. PHASE

UP - 2004-24

Search statement 2

way of example only, and is not limiting. Various alternations, improvements, and modifications will occur and are intended to those skilled in the art, though not expressly stated herein. These alterations, improvements, and modifications are intended to be suggested hereby, and are within the spirit and scope of the invention. Accordingly, the invention is limited only by the following claims and equivalents thereto.

What is claimed is:

1. A mask for use [on] with a layer of imaging material [which] where the mask is located on at least a portion of one surface of a substrate in a lithography process, the mask comprising a layer of a masking material which has an optical density of at least 4.0 for wavelengths at or below about 180 nm and a thickness equal to or less than about 1000 angstroms.

2. The mask as set forth in claim 1 wherein the layer of masking material comprises tungsten.

3. The mask as set forth in claim 2 wherein the tungsten has a thickness between about 400 angstroms and 1000 angstroms.

4. The mask as set forth in claim 1 wherein the layer of masking material comprises amorphous silicon.

5. The mask as set forth in claim 4 wherein the amorphous silicon has a thickness between about 400 angstroms and 1000 angstroms.

6. The mask as set forth in claim 1 further comprising an anti-reflective layer over at least a portion of the mask[.] and underneath the layer of imaging material.

7. The mask as set forth in claim 6 wherein the anti-reflective layer comprises a nitride, oxide, fluoride, or oxinitride of Ti, V, Cr, Zr, Nb, Mo, Ht, Ta, W, Cu, Ni, or Fe.

8. A lithography system comprising:

a substrate with at least one surface;

[a layer of imaging material on at least a portion of the one surface; and]

a layer of masking material which has an optical density of at least 4.0 for wavelengths at or below about 180 nm and a thickness equal to or less than about 1000 angstroms on at least a portion of the [layer of imaging material.] one surface of the substrate; and

a layer of imaging material on at least a portion of the layer of masking material.

9. The system as set forth in claim 8 wherein the layer of masking material comprises tungsten.

10. The system as set forth in claim 9 wherein the tungsten has a thickness between about 400 angstroms and 1000 angstroms.

11. The system as set forth in claim 8 wherein the layer of masking material comprises amorphous silicon.

12. The system as set forth in claim 11 wherein the amorphous silicon has a thickness between about 400 angstroms and 1000 angstroms.

13. The system as set forth in claim 8 wherein the layer of imaging material comprises photoresist.

14. The system as set forth in claim 8 further comprising an anti-reflective layer over at least a portion of the mask[.] and underneath the layer of imaging material.

15. The system as set forth in claim 14 wherein the anti-reflective layer comprises a nitride, oxide, fluoride, or oxinitride of Ti, V, Cr, Zr, Nb, Mo, Ht, Ta, W, Cu, Ni, or Fe.

16. A method for lithography comprising:

placing a mask over at least a portion of one surface of a substrate, wherein the mask has an optical density of at least 4.0 for wavelengths at or below about 180 nm and a thickness of less than about 1000 angstroms;

applying a layer of imaging material over at least a portion of the mask;

etching at least a portion of the layer of imaging material and the mask;

removing the remaining portion of the layer of imaging material; and

exposing the mask to radiation at wavelengths at or below about 180 nm.

17. The method as set forth in claim 16 wherein the mask comprises tungsten.

18. The method as set forth in claim 17 wherein the tungsten has a thickness between about 400 angstroms and 1000 angstroms.

19. The method as set forth in claim 16 wherein the mask comprises amorphous silicon.

20. The method as set forth in claim 19 wherein the amorphous silicon has a thickness between about 400 angstroms and 1000 angstroms.

21. The method as set forth in claim 16 further comprising applying an anti-reflective layer over at least a portion of the mask[.], wherein the layer of imaging material is applied over the anti-reflective layer.

22. The method as set forth in claim 16 wherein the anti-reflective layer comprises a nitride, oxide, fluoride, or oxinitride of Ti, V, Cr, Zr, Nb, Mo, Ht, Ta, W, Cu, Ni, or Fe.

* * * * *

PATNO IS 6368755

DATE: MAY 3, 2005
LIBRARY: PATENT
FILE: ALL

Your search request is:
PATNO IS 6368755

Number of PATENTS found with your search request through:
LEVEL 1... 1

Your search request has found 1 PATENT through Level 1.
To DISPLAY this PATENT press either the KWIC, FULL, CITE or SEGMTS key.
To MODIFY your search request, press the M key (for MODFY) and then the ENTER key.

For further explanation, press the H key (for HELP) and then the ENTER key.

LEVEL 1 - 1 PATENT

1. 6368755 , April 9, 2002 , Masks for use in optical lithography below 180 nm, Smith, Bruce W. - Webster, New York, 498775 (09), Rochester Institute of Technology, Rochester, New York, 02, February 5, 2000 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., ROCHESTER INSTITUTE OF TECHNOLOGY 5 LOMB MEMORIAL DRIVE ROCHESTER NEW YORK 14623, Reel and Frame Number: 10585/0012

CORE TERMS: mask, layer, optical, wavelengths, tungsten, lithography, thickness, density, chromium, silicon ...

LEVEL 1 - 1 OF 1 PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

6368755

<=1> Get Drawing Sheet 1 of 3

April 9, 2002

Masks for use in optical lithography below 180 nm

REISSUE: November 4, 2003 - Reissue Application filed Ex. Gp.: 1756; Re. S.N. 10/701,023 (O.G. January 13, 2004)

APPL-NO: 498775 (09)

FILED-DATE: February 4, 2000

GRANTED-DATE: April 9, 2002

CORE TERMS: mask, layer, optical, wavelengths, tungsten, lithography, thickness, density, chromium, silicon ...

6368755 OR 6,368,755

Your search request has found no CASES.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.